

IN THE CLAIMS:

1. (Currently amended) A method of increasing numbers of new brain cells in a patient comprising the steps of:

administering to a patient in need thereof, post neuronal injury, a therapeutic amount of a compound selected from the group consisting of L-arginine, sildenafil, statins, and phosphodiesterase inhibitors increasing numbers of new brain cells; as indicated by labeling the new brain cells with BrdU; and identifying increased numbers of new brain cells by double-labeling the detecting-BrdU-labeled brain cells additionally with neuronal markers NeuN and MAP2 or astrocytic marker GFAP, wherein brains cells positive for both BrdU and the neuronal markers NeuN and MAP2, or astrocytic marker GFAP, indicate an increase in new brain cells.

2-17. (Canceled)

18. (Previously presented) The method of claim 1, wherein the compounds increase levels of cGMP in the patient.